We claim:

1. A process for reducing the aerosol-related discharge from a separation column in which one or more components are separated off from a gaseous or liquid starting mixture at actively separating internals, aerosols being present or formed in a gas phase in the separation column, which comprises the actively separating internals being segmented at one or more separation points, the separation point(s) being determined in such a manner that the aerosols have at least 50% of their maximum particle size at the separation point or separation points, and an internal being provided at each separation point, which internal is operated under at least partially flooded conditions, at least in partial regions of the internal a continuous liquid phase being formed to which the aerosols are bound.

2. A process as claimed in claim 1, wherein the separation point(s) is (are) provided at the point (points) at which the aerosols have at least 80% of their maximum particle size.

3. A process as claimed in claim 1, wherein the separation point(s) is (are) provided at the point (points) at which the aerosols have at least 90% of their maximum particle size.

4. A process as claimed in claim 1, wherein the actively separating internals are segmented at one separation point.

5. A process as claimed in claim 1, wherein the internal operated under at least partially flooded conditions (the internals operated under at least partially flooded conditions) only partially fills (fill) the internal diameter of the separation column.

6. A process as claimed in claim 1, wherein the internal operated under at least partially flooded conditions (the internals operated under at least partially flooded conditions) is (are) a random packing bed, an ordered packing, a tray operated with trickling layer having a continuous liquid and disperse gaseous phase, or a mesh, knitted fabric or nonwoven made of metal, plastic or glass.

7. A process as claimed in claims 1, wherein the specific surface area of the internal operated under at least partially flooded conditions (the internals operated under at least partially flooded conditions) is in the range from 60 to 2 500 m^2/m^3 and the

porosity is in the range from 85 to 98%.

8. A process as claimed in claim 1, wherein an external gas, vapor and/or liquid stream is fed to the separation column downstream before the internal operated under at least partially flooded conditions (the internals operated under at least partially flooded conditions), based on the feed of the gaseous or liquid starting mixture, which external stream is controlled in such a manner that it causes the saturation or supersaturation of the gas phase in the separation column.

9. A process as claimed in claim 1, wherein a defined pressure drop is generated at the internal operated under at least partially flooded conditions (at the internals operated under at least partially flooded conditions), via an external liquid feed and/or removal.

10. A process as claimed in claim 9, wherein the pressure drop at the internal operated under at least partially flooded conditions (at the internals operated under at least partially flooded conditions) (3) is set in the range from 0 to 200 mbar.

11. A process as claimed in claim 1, wherein the separation column is a gas scrubber to which are fed a gaseous starting mixture and a scrubbing liquid.

12. A separation column in which one or more components are separated off at actively separating extensions from a gaseous or liquid starting mixture, aerosols being present or formed in a gas phase, wherein the separation column is segmented at one or more separation points which are determined as defined in claim 1, in such a manner that the separation column is fitted at every separation point with an internal which is operated as defined in claim 1 and that a defined pressure drop is generated via an external liquid feed and/or removal at the internal operated under at least partially flooded conditions (at the internals operated under at least partially flooded conditions).

13. A separation column as claimed in claim 12, wherein the pressure drop at the internal operated under at least partially flooded conditions (at the internals operated under at least partially flooded conditions) is set in the range from 0 to 200 mbar.

14. A separation column as claimed in claim 12, wherein the actively separating internals are segmented at one separation point.

15. A separation column as claimed in claim 12, wherein the internal operated under at least partially flooded conditions (the internals operated under at least partially flooded conditions) only partly makes up (make up) the internal diameter of the separation column.

16. A separation column as claimed in claim 12, wherein the internal operated under at least partially flooded conditions (the internals operated under at least partially flooded conditions) is (are) a random packing bed, an ordered packing, a tray operated with trickling layer having a continuous liquid and disperse gas phase, or a mesh, knitted fabric or nonwoven made of metal, plastic.

17. A separation column as claimed in claim 12, wherein the specific surface area of the internal operated under at least partially flooded conditions (the internals operated under at least partially flooded conditions) is in the range from 60 to 2 500 m^2/m^3 and the porosity is in the range from 85 to 98%.

18. An apparatus as claimed in claim 12, wherein the separation column is a gas scrubber to which are fed a gaseous starting mixture and a scrubbing liquid.

19. The method of using of a process as claimed in claim 1 or a separation column as claimed in claim 12 for purifying gas streams which have a tendency to form condensation aerosols, in particular gas streams which contain gaseous hydrogen halides, in particular hydrogen chloride and/or hydrogen bromide, gaseous sulfur trioxide, gaseous sulfuric acid or gaseous nitrogen dioxide, and which come into contact with aqueous solutions, in particular with aqueous solutions which contain ions produced in the absorption of the abovementioned substances in water.

20. The method of using of a process as claimed in claim 1 or a separation column as claimed in claim 12 for purifying gas streams which have a tendency to form reaction aerosols, in particular for purifying gas streams which contain gaseous ammonia and gaseous hydrogen chloride.

21. The method of using of a process as claimed in claim 1 or a separation column as claimed in claim 12 for purifying gas streams which have a tendency to form sublimation aerosols.

22. A process as claimed in claim 7, wherein the porosity is in arrange from 91 to 96 %.

23. A process as claimed in claim 10, wherein the pressure drop is set in the range from 5 to 40 mbar.

24. A process as claimed in claim 11, wherein the gaseous starting mixture and the scrubbing liquid of fed in countercurrent.

25. A separation column as claimed in claim 13, wherein the pressure drop is set in the range from 5 to 40 mbar.

26. A separation column as claimed in claim 17, wherein the porosity is in the range from 91 to 96 %.

27. An apparatus as claimed in claim 18, wherein the gaseous starting mixture and the scrubbing liquid are fed in countercurrent.

28. A method of using as claimed in claim 19, wherein the gas streams contain hydrogen chloride and/or hydrogen bromide, gaseous sulfur trioxide, gaseous sulfuric acid or gaseous nitrogen dioxide, and which come into contact with aqueous solutions which contain ions produced in the absorption of the abovementioned substances in water.

29. A method of using as claimed in claim 20, for purifying gas streams which contain gases ammonia and gases hydrogen chloride.